

MEDICARE PAYMENT ADVISORY COMMISSION

PUBLIC MEETING

Ronald Reagan Building  
International Trade Center  
Horizon Ballroom  
1300 13th Street, N.W.  
Washington, D.C.

**Thursday, September 9, 2004**  
**10:36 a.m.**

COMMISSIONERS PRESENT:

GLENN M. HACKBARTH, Chair  
ROBERT D. REISCHAUER, Ph.D., Vice Chair  
JOHN M. BERTKO  
FRANCIS J. CROSSON, M.D.  
AUTRY O.V. "PETE" DeBUSK  
NANCY-ANN DePARLE  
DAVID F. DURENBERGER  
ARNOLD MILSTEIN, M.D.  
RALPH W. MULLER  
ALAN R. NELSON, M.D.  
CAROL RAPHAEL  
DAVID A. SMITH  
RAY A. STOWERS, D.O.  
MARY K. WAKEFIELD, Ph.D.  
NICHOLAS J. WOLTER, M.D.

## **AGENDA ITEM:**

### **Mandated report on Medicare+Choice payment rates, payment areas, and risk adjustment**

**-- Dan Zabinski**

DR. ZABINSKI: Today I'm going to discuss work that we completed on a study that is mandated by the MMA that analyzes some features of a payment system in the Medicare Advantage or MA program. Our work on the study is far from complete so we will be presenting additional work at upcoming meetings.

Local MA plans are facing several changes to the system that sets their payments. First, the MMA has reestablished use of adjusted average per capita cost, or AAPCC rates, which are linked directly to local per capita fee-for-service spending. Also there is a new system for risk adjusting payments to MA plans, the CMS-HCC risk adjustment model. Finally, there will be a new payment system in 2006 for local plans which will use plan bids to help determine their payments.

The MMA directs MedPAC to study three issues related to these changes in the payment system. First, we are to look at the factors that underlie geographic variation in AAPCC rates and determine how much the variation in the rates is attributable to each of these factors. Also we are to identify an appropriate payment area for local plans. And finally we are to assess the predictive accuracy of the new risk adjustment system, the CMS-HCC in predicting costs for different groups of beneficiaries.

This report is due by June 8, 2005. We have begun work on it, but as I mentioned earlier, our work is far from complete. Over the next few slides I will discuss each of these issues and the results from the analyses that we have completed so far.

First I'd like to talk about our analysis of the variation in AAPCC rates. AAPCC rates are linked directly to local per capita fee-for-service spending which has much variation among counties which currently serve as the payment area for MA plans. Prior to 1998, the Medicare risk program used AAPCC rates as a basis for all payments. The geographic variation in AAPCC rates, however, became a problem. That is, the level of AAPCC rates was shown to be correlated with local availability of plan and plan generosity. That is, the counties that had relatively high payment rates tended to attract many more plans than the counties that had low payment rates, and the generosity of the plans with the high payment rates tended to be much better than the generosity of the plans in the low payment areas.

These discrepancies between counties led to perceptions of inequity. Therefore, by reestablishing a direct link between local fee-for-service spending and payment rates the new payment system in the MA program may increase geographic variations in payments, availability of plans, and generosity of benefits.

In our all estimates of how much different factors affect variation in AAPCC rates we simplified our method by analyzing five-year averages of counties per capita fee-for-service spending adjusted for county-level differences in health status where the county-level differences in health status were measured with average risk scores from the CMS-HCC risk adjuster.

We found out about 15 percent of the variation in per capita fee-for-service spending is

explained by differences in the cost of inputs to care and special payments to hospitals including IME, GME and DSH payments, and the remaining variation to three factors. First of all, providers' practice patterns and then beneficiaries' preferences for care, and finally, mix of providers. An example of how mix of providers affects variation is that Medicare makes different facility payments for the same procedure whether it is performed in a hospital outpatient department or an ambulatory surgical center. Therefore, variation in spending can be affected by physicians' use of ASCs rather than HOPD more frequently in some areas than others.

Now I would like to move onto our analysis of the appropriate payment area for local plans. Counties currently serve as the payment area for MA plans. But we have found that using counties as payment areas does create some problems. First, by using a four-year moving average of per capita fee-for-service spending we found substantial changes in AAPCC rates from year to year for many counties, especially those who have relatively small Medicare populations. These large year to year changes can make certain counties unattractive to plans because of uncertain revenue streams.

Also we found that adjacent counties often have very different AAPCC rates. In these circumstances, plans may be attracted to the county with the high rate and may try to avoid the county with the low rate, creating appearances of inequity between neighboring counties.

Our quantitative analysis of the appropriate payment area consist of comparing counties to a larger payment area comprised of statewide rural areas and then what I call within-state MSAs, which are defined as the following. If an MSA lies entirely within a state's boundaries, that MSA would serve as a single payment area. But if an MSA is divided by a state boundary, such as the Minneapolis-St. Paul MSA which is divided by the Minnesota-Wisconsin state border, the part of the MSA within each state serves as a separate, distinct payment area. One thing I want to emphasize is that this larger payment area we are using strictly as an analytical tool. I want to say that we are continuing our work on identifying the appropriate payment area.

Our comparison of counties to the larger payment area reveals that large year-to-year changes in per capita spending are less frequent under this larger payment area. For example, on this chart we show that under the county system, 23 percent of counties have a change in per capita spending 2001 to 2002 of 3 percent or more. But under the larger payment area only 3 percent of counties have a change from 2001 to 2002 of 3 percent or more.

We also found that the large differences in AAPCC rates between adjacent counties are less frequent under this larger payment area. For example, under the county system of the payment area, 23 percent of beneficiaries live in counties that have an adjacent county with per capita spending that is at least 15 percent higher than that county's rate. In contrast, under the larger payment area, only 10 percent of beneficiaries live in counties that have an adjacent county with per capita spending that is at least 15 percent higher than that county's rate.

The reason why we see this result is that using the larger payment areas tends to increase rates for counties with low rates and depress rates for counties with high rates. In the end we found that 47 percent of beneficiaries live in counties that have higher rates under the larger payment area and 53 percent live in counties that have lower rates under the larger payment area.

Now lastly I'd like to talk about our assessment of the predictive accuracy of the CMS-HCC risk adjuster. First a little bit of background on why risk adjustment is important. If a risk adjuster does not accurately predict beneficiaries' cost, plans may be overpaid for enrollees who are in good health and underpaid for those enrollees who have poor health. Therefore, plans who attract relatively healthy enrollees would be rewarded and those who are attracting sick enrollees are punished. A good risk adjuster would reduce these payment inaccuracies.

We analyzed how accurately the CMS-HCC predicts costliness using predictive ratios from 2002 where a predictive ratio for a group of beneficiaries is the mean of their costs as predicted by the CMS-HCC divided by the mean of the group's actual cost. The closer a predictive ratio is to one, the better the risk adjuster has performed.

In our analysis of the accuracy of the CMS-HCC in predicting cost, our database consists of beneficiaries who participated in fee-for-service Medicare in 2002. We grouped these fee-for-service beneficiaries by indicators of health status, including the diseases that they had diagnosed in 2001, how much the program spent on them in 2001, and the number of inpatient stays they had in 2001. For each of these groups we compared the predictive ratios from the CMS-HCC to predictive ratios from a model that uses beneficiaries age and sex to predict costliness. This age/sex model has been used in several other studies as a point of comparison for other risk adjustment models. It is similar to a demographic model that CMS currently uses to risk adjust payments and has used for a number of years.

Now for each group of beneficiaries we found that the predictive ratios from the CMS-HCC are closer to one than are the predictive ratios from the age/sex model, indicating that the CMS-HCC performs better than the age/sex model in general. For example, on this diagram we divided beneficiaries by conditions that were diagnosed in 2001. For each of these conditions you can see that the predictive ratio is closer to one under the CMS-HCC than under the age/sex model.

At this point one thing I want to mention is there's another statistic that is often used to measure performance of risk adjustment models, that being the r-squared. What the r-squared tells you is how much of the variation in beneficiaries' cost is explained by a risk adjuster. In other words, it tells us how well a risk adjuster predicts costs for an individual, while the predictive ratio tells us how well a risk adjuster predicts costs for a group of beneficiaries with similar circumstances.

We know that the CMS-HCC explains about 10 percent of the total variation in cost, or about half the variation in costs that are not due to random events; that is the predictable variation. What that tells us is that for any randomly selected beneficiary the CMS-HCC is likely to make a fairly large error in predicting their cost. However, I think it is more important that the predictive ratios on this slide indicate the CMS-HCC actually predicts costs quite well for groups of beneficiaries with specific conditions. That is a key result because what that indicates is that there's little for plans to gain or lose on average if they have beneficiaries with these conditions as enrollees.

Finally, I would like to close by discussing our next steps in this analysis. At the beginning of the presentation I said that the work presented here is only a beginning for our overall analysis. Additional work we intend to do includes examining how well AAPCC rates reflect plan costs. This will indicate how well plan payments match their cost of providing care and will use data from adjusted community rate proposals to approximate plan costs.

Also we will complete our analysis of the appropriate payment area. We will consider a number of alternative payment areas and consider how well each of them stacks up against a number of criteria, such as the availability of data for each alternative, whether the number of beneficiaries in each alternative is high enough to obtain reliable payment rates, and finally, how well each alternative matches to plan market areas.

Now at this point I want to say I am not very hopeful that we, or anybody else for that matter, can actually identify an ideal payment area. Instead I think the best that we can do is to identify a payment area that is the best of several alternatives.

MR. HACKBARTH: Let me just pick up with that very point. You mentioned two factors that we want to be sensitive to, the stability in the rates over time in the geographic unit we're talking about, and that obviously mitigates in favor of larger geographic units. Then the second is that we want to, to the extent possible, reduce boundary problems, defined as big changes in payment as you move across the unit boundaries. That too argues in favor of larger units.

In the past, the other consideration that people have worried about is that the larger the unit gets, the more heterogeneous it becomes, potentially creating an opportunity for plans to set up operation in the low cost part of a high-cost payment area, and through that process to take advantage of the system. Theoretically, I guess that is a risk.

The question I'd like to ask is, is it just a theoretical risk or is this a real world problem to be concerned about?

DR. ZABINSKI: I assume you're talking about the final point I made. Scott might be able to speak better to this but I'll give it a shot. In some sense it's theoretical because plans aren't supposed to do that. They're supposed to serve an entire area that they move into. But on the other hand, what that might do then is, if you mix these heterogeneous markets and you require them to serve the whole thing, that may dissuade plans from moving into certain areas that they otherwise would if you had a little bit smaller area.

MR. HACKBARTH: And requiring plans to serve entire large units could be easier for some types of plans than others. Plans like Kaiser that are facility based have less flexibility in that regard than network plans that use a contract delivery system.

DR. HARRISON: I think we were thinking of making sure that the areas we looked at an appropriate size that plans would be able to serve the entire thing. We would look at alternatives. I know CMS is now going through this is the regs trying to figure out what kind of network adequacy to put on the regional plans to make sure that they serve the whole thing, and we will think about that.

MR. BERTKO: First of all, I think this is a very good study and illuminates many of the problems, and risk adjustment is pretty clear. I guess I would comment on the stability issue. I know that Dan and Scott's study over time, I think that is an appropriate solution, particularly with smaller population counties that might have blips over time. They can be evened out using moving weighted averages.

On the area of having big MSA type things I'd only point out that some of the large, urban MSAs are really huge, and that in the commercial world, under-65 employed populations there frequently are rating areas and the delivery systems and the delivery system costs can be quite different. So in addition to the heterogeneity that you pointed out, you actually have to worry about what are you paying, are you paying the right amount so you're getting the right revenue in there.

In the absence of a much better solution I would say, particularly for 2006 as we move into a new bidding mechanism as described earlier, we may want to be restrained on how promptly we call for a change, given everything. We're going to continue to have discrepancies and the question here I'd ask our panel and the researchers is, is something new better, as opposed to living with the current things that we know more about?

MR. DURENBERGER: I was pleased to hear your conclusion at the end about we're probably going to come up with the best of several alternatives, because it strikes me, and I've been somewhere in this AAPCC world for 20 some years now, that that really is the way the Medicare program ought to work over time. That there is not one ideal geographic area as we

move in this direction. It will be so helpful if we can, through an analysis, present the several alternatives in ways that make sense in different areas and different parts of the country and so forth, and then allow the decisions about best of to be left to some other part of the process.

If I understand it this is still correct, since this data is all premised on residence of beneficiaries, right? It is always confusing till you get that point because we think about it as reflecting what are the costs in Minneapolis, even though maybe half of the expenditures for were costs in Minneapolis are reflected in the cost in some rural county because people are shipped in to get their tertiary care.

So for those of us who come from, like this little example of the Three Musketeers sitting here in the Upper Midwest, it also might be informative to look at some experiences that we have had with large integrated systems. One that comes to mind is the Marshfield Clinic in the middle of Wisconsin, which also has an MA plan. And to the point of what you expressed, the concern about making money here and moving it over there, these obviously are things that integrated systems deal with all the time, as well as how much money ends up with primary care folks and specialists and things like that. But it's not necessarily a bad thing.

Again, the relationship between the plan and the practice in that community and the way in which people are referred from one place to the other, I would suggest, would be informative to at least demonstrating that there are alternative ways to approach the decisionmaking. I know it is getting complicated as we get into this, and I know you've got a short deadline and things like that, but it strikes me that those are important issues today as we move towards regionalization generally. Those are really important illustrations that we can make as people examined the conclusions we're going to come to.

MR. HACKBARTH: So under the geographic issue, the end product, particularly given this time frame, is that we are not seeking to come up with the right geographic unit. In fact almost by definition I guess there isn't a single right. You're talking about a problem of trading off different goods, if you will. But rather looking at a product that says, here are some different options and the strengths and weaknesses of each.

DR. REISCHAUER: On that very point, both the paper and your presentation was a bit enigmatic about what the alternatives are. We have county, we have MSA. Presumably there's the geographic units that Wennberg uses, but I don't know what kind of data is collected that way. And I'm scratching my head thinking, what else is there out there? These have their deficiencies, but aren't the things that if we can't even think about or don't even though we should be thinking about, probably having even greater deficiencies? How much more is there to go?

DR. ZABINSKI: I know one geographic unit that's been studied by researchers at CMS for a number of years is something called empirical market areas. The concept I think is very sound. What they try to do is link together counties where there is a lot of border crossing by beneficiaries to get care for one to the next. The idea is to get payment areas that closely match plan market areas or insurance market areas.

The problem is they found it almost necessary to use a complete trial and error method. There wasn't real concrete thresholds on this border crossing idea to form a particular payment area. It was so cumbersome to do it they've only been able to do one state. But like I said, in terms of theoretical I think it's very sound but I can't see it working practically.

DR. REISCHAUER: I'm just thinking off the top of my head so this may be absolutely crazy, but what about having a choice between where people live and where they get services? I'm thinking of my own experience. I live in Montgomery County and to my knowledge I've never been to a medical facility in Montgomery County. Everything is in the District. So why

shouldn't I be in a District plan? Just cutting this thing totally differently in calculating payments by where people get their services as opposed to where they live.

DR. MILLER: I think the kinds of things we've been thinking of trolling through are counties, different versions of MSAs, private -- I was waiting for one of you to mention -- we are going to look at private plan service areas. There is probably referral-based types of area which are sort of the Wennberg stuff.

I will speak on this. I have to say, we have not thought about this idea and I'd really have to spend some time thinking about what the implications of that are. It's not to say no, but this is the first I've ever thought of it. But I don't know.

DR. HARRISON: I think the only constraint we have is we need to use counties as building blocks because I do not think we have enough data for any other type of geographic building blocks, like census tracts or anything.

MR. MULLER: I would be somewhat cautious on that because when you see all the efforts people have made to link themselves to geographic areas for labor adjustments and so forth, you start bussing patients to get into empirical use patterns, though I'm glad to see that Bob is endorsing large, urban providers as a place of choice.

DR. CROSSON: I guess in the end I would just wonder whether the benefit from changing to a larger area, which appears to decrease the year-to-year variability for one thing, which as John said could be potentially fixed in another way, perhaps a simpler way, whether that benefit is worth, in the next few years, the disruption potentially that would take place by changing it, given the fact, as already indicated from the discussion, that there is no obvious way to do that.

MR. HACKBARTH: Just a clarification. As I recall, the current county level is based on a five-year moving average. So we already try to reduce the variation due to small size by using a moving average. But even after you do that, you get results that were described earlier. There still is substantial variation. Some of the counties are so small in terms of population of Medicare beneficiaries.

DR. ZABINSKI: There is a county in Texas that has 20 beneficiaries.

DR. REISCHAUER: When you think about this though from a business standpoint, nobody is going to set up a plan for 20 people. They're going to be part of a much greater unit, and no matter what happens to the payment in that county it's not really going to affect the bottom line because only two of those 20 people are going to join this plan. So we can get all worked up about great variation in very unimportant numbers from a business standpoint.

MR. HACKBARTH: I think that is an extreme example.

DR. REISCHAUER: For every year they are woefully underpaid, there is a year that they are woefully overpaid. Over time this should average out.

MR. MULLER: I think going back to some of the AAPCC is a good thing when you see some of the efforts coming out of BBA when we went to the national averages and so forth which started bringing up whole parts of the country to payment patterns that were inconsistent with their costs, I don't think that is a good way to equalize, dealing with the issue of variation in costs. To go back, despite the famous or infamous Minneapolis, Miami-Dade comparisons and the twofold differences in cost, to go back, because I don't think one is going to change that overnight. It takes generations, if ever, to change the underlying reasons for that variation.

So to have the plans in fact reflect the cost of the region, understanding that it may be different in Minneapolis, may be different in Miami, may be different in San Jose. But to go more closely back to what the costs are in that region as a point of comparison, rather than

having certain localities and states being moved up to national averages, which has been part of the politics of the last seven, eight years in a whole variety of our payment areas. So I think if we can move back to some kind of local standardization rather than moving towards national standardization and the kind of arbitrariness in moving people up to the national average, I think that is a good thing that we are going towards.

MR. HACKBARTH: I just want to make a clarification so I'm not misunderstood. I wanted to be clear, I agree with Jay's basic point that in addition to looking at the analytics of this, I think the timing of these changes is important. I think John was making the same point. Even if there was a unit that we could come up with that offered some additional benefit in terms of our criteria, I think you need to take into account what is happening at the same time, and that may argue in terms of not making this the highest priority change for the Medicare Advantage program right now.

DR. HARRISON: In the regs, CMS is actually looking for some guidance about how to pay for payment areas. They are saying that they are not wedded to going back to weighting things by county. In other words, if a plan is serving more than one county, they may not go back and pay based on county. They are thinking about other alternatives. So in 2006 the timing may actually be right to come up with something different because they are looking for something.

MR. HACKBARTH: Any other comments?

Okay, thank you very much.